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FEATURES

2 NEW WORLD DATA SHEET
PRB's wallchart has the numbers

3 DEMOGRAPHICS CUSTOMIZED FOR YOU
From Donnelley Marketing Information Services and PRB

3 IMMIGRATION BILL TRIES AGAIN
Simpson-Mazzoli and the Roybal alternative

4 CHINA SHIFTING BIRTH POLICY?
Hints in the *People's Daily*

4 FERTILITY IN SRI LANKA
3.7 children per woman (1981)

5 MEXICO CITY COUNTDOWN
Prep committees do their job

5 WORRALL TO BE PRESIDENT EMERITUS

6 COMPARING NATIONS' INFANT MORTALITY RATES
Can it be done?

8 ACID RAIN THREATENS FORESTS
New Worldwatch Paper

8 SPEAKING OUT
"Growth usually leaves us better off..."

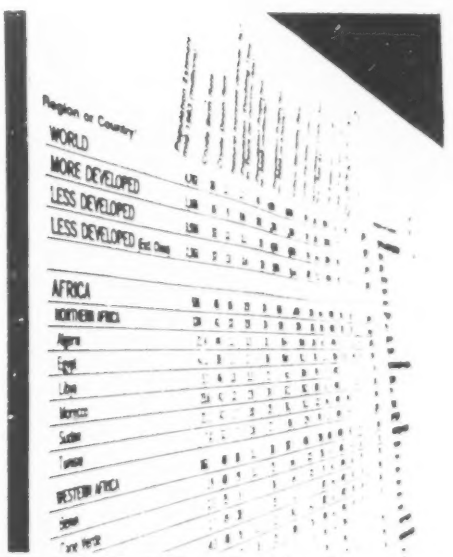
8 CHRISTOPHER TIETZE, 1908-1984

9 THE WORLD'S DIET
Animals eat one-third of cereal production

12 SPOTLIGHT ON CANADA
The U.S.'s neighbor has growing cities, high immigration rates, and bilingualism

DEPARTMENTS

SURVEY REPORT (Sri Lanka CPS) 4
POSITION OPENING 5
SPEAKING GRAPHICALLY 5
DEMOGRAPHER'S PAGE 6
OPINION 8
POPULATION UPDATE 9
WORLD FOOD NEWS 9
LETTERS TO THE EDITOR 10
TAKE A NUMBER 10
CURRENT READINGS 11
SPOTLIGHT (Canada) 12



PRB's 1984 World Data Sheet has the numbers. See page 2.

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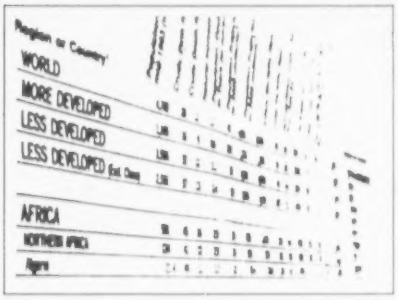
New World Data Sheet: Numbers and Policies

The governments of 62 countries containing 60 percent of the world's population now see their country's birth rate as too high, according to PRB's just-published 1984 *World Population Data Sheet*.



The *Data Sheet* gives basic demographic statistics for 172 countries—countries with a population of 150,000 or more and all United Nations Member States. In all, exactly 3,000 separate entries for the world, its countries and regions.

As of mid-1984, the world's population is estimated to be 4.762 billion people, growing at a rate of 1.7 percent per year. The growth rate results from a birth rate of 28 births per 1,000 population and a death rate of 11. This means that the world grows 83 million persons each year, an amount roughly equal to the present population of Nigeria. The population growth rate of less developed countries is approximately three and one-half times that of more developed countries; many of the latter have growth rates approaching zero or are actually decreasing in size (Denmark, Hungary, and West Germany).

Frequently, a country's population policy is difficult to classify and, while the single-letter categorization on the *Data Sheet* can be used for a preliminary indication of a country's position, there are many shades of gray surrounding the presence or absence of officially stated policies. A government may be concerned about a high or low rate of growth, but it may be politically sensitive to make forthright statements. A country may find that combinations of privately funded family planning programs and indirect government support work well enough, obviating the need for official statements.

Nonetheless, an overview of population policies gives the following general conclusions: more and more LDCs are becoming concerned with population growth, moving away from the attitude that a large population facilitates development. Many MDCs, on the other hand, are quite concerned with low birth rates and the prospect of sustained population decrease. There is also a pattern of more and more restrictiveness on immigration policies emerging among the more developed countries of Europe due to the low birth rates of native populations compared to those of non-native temporary guest workers.

Other *Data Sheet* highlights:

- The world is now projected to reach 6.3 billion by the year 2000, an upward adjustment which stems primarily from reevaluation of fertility in India and some reported shifts in the implementation of China's population policy. The projection given on the *Data Sheet* assumes that China's total fertility rate will decrease from the present reported rate of 2.6 lifetime births per woman to 2.1 by the early 1990s and remain at that level, essentially a "replacement level" projection.
- Bangladesh, based upon a mid-1984 population of 99.6 million, should pass the 100 million mark this year. Vietnam, now the world's 13th largest country, should pass West Germany in about three years.
- Finally, welcome to St. Kitts-Nevis, with 44,000 people, the 172nd country to be shown on the *Data Sheet* by virtue of having joined the UN. □

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Customized Data Offered by Donnelley/PRB

Do you need to know who lives within 5 miles of Madison Square Garden? The number of people within 3 hours driving time from Myrtle Beach, S.C.? Or the annual per-capita expenditures for footwear for anyone living within half a mile of the Santa Monica Freeway?

Until the advent of computers, obtaining such data was practically impossible. Now, however, private concerns, using Census Bureau data and sifting and manipulating it through their own computers, can provide the answers to such esoteric questions with comparative ease. And in March, PRB was pleased to announce its association with the University program set up by Donnelley Information Services, of Stamford, Conn., to explore innovative ways to use large demographic datasets. Specifically, PRB has gone online with Donnelley's *American Profile*, an unusually flexible and detailed description of the U.S. population.

Working with Donnelley, PRB's role will be to help make the use of "demographics" better known and to suggest additional uses and modifications of such a system, as well as seek suggestions from others. A full description of *American Profile* will appear in an upcoming issue of *PT*.

While reports can be generated for such familiar units as counties, census tracts, and ZIP Codes, the system will also allow you to sculpt the geography to meet your own needs; define an area, and the system will provide the data for that area. The *American Profile* provides an entire series of reports on population, age, sex, income, education, and buying habits. Special reports are also available on the market potential for over 175 products. A particularly valuable addition to the database are demographic estimates updated to 1983 and projected to 1988 (soon to be released for 1984 and 1989, respectively).

The use of such a remarkable tool has wide-ranging analytical possibilities. Customized analyses can be performed for an unlimited number of purposes. If one needs to know how people are affected by noise near major airports, demographic profiles of noise "footprints" can be readily produced. The most beneficial locations for schools, firehouses, hospitals, etc., can easily be pinpointed in changing suburban areas. Questions previously difficult to answer without a major study, can be easily, and relatively cheaply, answered with *American Profile*.

Inquiries are welcome about this recent addition to our demographic facilities. Write or call PRB's Cary Davis or Carl Haub: (202) 785-4664. □

Immigration Bill Tries, Tries Again

By mid-May, Rep. Romano Mazzoli's (D-Ky.) immigration reform bill is expected to reach the floor of the House of Representatives. Dozens of amendments are expected to be proposed for the Mazzoli bill—including some drawn from a new "Hispanic alternative" bill introduced in February 1984 by Rep. Edward Roybal (D-Calif.).

Mazzoli's bill is the House version of "Simpson-Mazzoli"—the first major attempt to reform U.S. immigration law in about 30 years. It seeks to control the flow of illegal immigrants into the U.S. and grant legal status to many of the millions of undocumented workers and their families now in this country.

The Senate's Simpson bill (sponsored by Sen. Alan Simpson, R-Wyo.) includes penalties for employers who hire illegal aliens, proposes a national workers' identification card system, grants legal status to certain undocumented workers and gives them access to federal benefits after several years. The similar Mazzoli bill is on the whole less restrictive, granting legal status to greater numbers of persons, sooner, and calls for study of the feasibility of a worker ID system rather than mandated establishment of one.

The Simpson-Mazzoli bill represents a response to the concerns of workers and government officials about the rising population of undocumented aliens (estimated at anywhere from 3 to 6 million, though no one really knows). But a variety of interests have also opposed the legislation—Hispanic groups who fear it would kindle discrimination against all Hispanics; employers who prefer the present tolerant de facto situation; and civil libertarians, who worry about the civil-liberties implications of any sort of national ID system. The new Roybal bill could conceivably provide a rallying point for these interests. It does *not* include an ID system or employer sanctions, but rather puts the emphasis on increased funding for the Immigration and Naturalization Service's (INS) Border Patrol, and enforcement of existing laws.

Two years running, Simpson-Mazzoli has passed in the Senate and died in the House. In Fall 1983, House Speaker Thomas P. O'Neill Jr., (D-Mass.) blocked floor consideration of the Mazzoli bill saying he feared President Reagan would veto the bill to win Hispanic support for his reelection campaign.

Later Reagan reaffirmed his support for some immigration legislation while admitting disagreements with the Mazzoli bill. He said he wanted to sign some immigration legislation as quickly as possible.

In a reversal, O'Neill allowed the bill to be scheduled this spring. However, in a memorandum to members of the Administration in January, Office of Management and Budget Director David Stockman expressed new concern about any comprehensive immigration bill, saying that the cost would probably be unacceptable.

Members of Contress now intend to seek Reagan's "concurrence" before taking any action on a compromise immigration bill to try and avoid a veto. □

FROM THE EDITOR'S DESK

Although changes in the population pecking order of cities (see page 10 of this issue) and countries (see page 2) are often of vital practical interest, stare at those statistical sizes until your eyes water, and you may end up asking yourself the classic existential question, So what?

Is a big city (i.e., more populous) intrinsically *better* than a small one? More important? If a city grows, is that a compliment? If it shrinks, is that a slight? Suppose Los Angeles was actually 12 little cities?

Are big countries more *important* than small ones? More secure, like giant oak trees? (More insecure, like giant oak trees?) Should countries aspire to be big?

These gloomy springtime thoughts are occasioned by the annual realization that no matter how grandiose, powerful, and populous the Washington, D.C. metropolitan area may be (3.1 million, seventh largest in the nation as of 1980), it's all ashes without major league baseball.

Art Haupt

China Shifting Births Policy?

Although China's policymaking machinery moves in mysterious ways, some signs have appeared that China may be softening, or at least adjusting, its rigorous family planning policy.

The sign was a dispatch appearing in the March 8, 1984, issue of *People's Daily*, which reported an early March conference "of great importance" involving directors of family planning commissions from all provinces. Neither the article nor (apparently) the conference avow any fundamental change in the fundamental policies of the one-child family and the goal of 1.2 billion population by 2000. (China's population was estimated to be 1.023 billion in 1983.)

But in expressing the will of the conference, the article went out of its way to allude to possible program problems and the importance of reasonable and conciliatory implementation. "On the one hand, we must control the population growth rate to realize the planned target," it said. "On the other hand, we must take the actual condition of some people into consideration. This requires that family planning workers . . . improve their work method and work style, refrain from coercion, strictly forbid any illegal and disorderly action, and carry out their work consistent with actual conditions and reasonably." Although the allusions are very general, for them to appear at all is considered quite unusual.

In addition, rumors have surfaced that the one-child policy might be moderated in some cases to two children when the first child turns out to be a girl. These rumors have been promptly denied, but the fact that they have surfaced (in the form of letters to China's media) also indicates something in the wind.

Judging by these signs, a policy relaxation of some kind may be forthcoming. If so, word of such a change would be passed down the administrative chain of command during coming months and ultimately publicized in some way—as all the while the government tries to ensure that no citizen overestimates the change. □

SURVEY REPORT

Sri Lanka CPS

Sri Lanka, an island nation 18 miles off the coast of India, has recently released the results of its 1982 Contraceptive Prevalence Survey (CPS), taken by the Dept. of Census and Statistics in collaboration with Westinghouse Health Systems, augmenting its excellent vital statistics and the World Fertility Survey held in 1975.

At present, Sri Lanka's population of 16 million has a rate of natural increase birth rate minus the death rate) of 2.2 percent per year, but the growth rate itself is about 1.8 percent due to net emigration.

About 50 percent of the population live in the fertile southwestern corner of the West Virginia-sized island, which features a low coastal plain to the north and rises to the mountainous south-central region where Sri Lanka's famous tea is produced. The country has tried to diversify its formerly agrarian economy, although this process has resulted in some debt problems.

Population growth has been a major concern in Sri Lanka, with family planning permitted in the early 1950s and a formal policy adopted in 1965. Fertility has declined from a total fertility rate (TFR) of 5.5 children per woman in 1960 to 3.7 in 1981.

In the latter half of the 1970s, the TFR actually apears to have risen from 3.4 in 1975. This rise in fertility is somewhat deceptive, however. Since virtually all childbearing takes place within marriage in Sri Lanka, marital fertility rates are a more revealing indicator. Comparing the CPS 1981 rates to the WFS 1975 rates, the report notes there has been no increase in marital fertility overall and, in fact, the two surveys suggest an overall decrease. The overall rise in the TFR can be explained by the increase in the number of marriages from 94,166 in 1975 to 121,668 in 1981.

The survey also found that:

- The average number of children considered "best" was 2.8. At age 27, 50 percent of the women said that they wished to cease childbearing. The number of children *wanted*, however, obtained by summing the number of children a woman had and the additional number desired was 3.2.
- Contraceptive knowledge was universal, 99 percent saying that they had heard of some method, up from 91 percent in 1975. This percentage was uniform for all age groups.
- Current use of a contraceptive method was up to 55 percent, compared to 32 percent in 1975, but nearly half of this was accounted for by rhythm, withdrawal, or other traditional methods. Female sterilization was by far the predominant modern method, 17 percent. □

Countdown to Mexico City

Preparations for the International Conference on Population (ICP) continue—in particular, the final preparatory committee meeting in New York Mar. 12-16 succeeded in coming to agreement on the 80 or so paragraphs of recommendations that will serve as the basis for discussion when the ICP meets this August in Mexico City. The recommendations are for implementing the World Population Plan of Action. Previously, there had been concern that they might be too diffuse and lengthy. But the January 1984 prep committee meeting made some headway in reducing them, and the March prep conference—which was attended by many population-specialized representatives from the nations involved—appears to have succeeded in coming up with a set of recommendations that resolved the issues.

Amb. Richard Benedick, the State Dept.'s Coordinator of Population Affairs, is the U.S. government's interagency coordinator for the ICP. Selection of the U.S. delegation has not been settled, and remains under discussion at the White House. □

Worrall Named PRB President Emeritus

Dr. Robert P. Worrall, PRB President since 1979, was named President Emeritus and Senior Specialist in Development Communication at the March annual meeting of the Board of Trustees. Chairperson Mildred Marcy said the Board approved Worrall's request for relief from administrative duties effective upon the selection of his successor and welcomed his continued active participation on the staff.

Worrall, who first served on the Bureau's 1974 Task Force to reassess PRB's role, joined the staff as Vice President for Program and Staff Development in 1976. Earlier as Assistant Director of the East-West Communication Institute at the East-West Center in Honolulu, Hawaii, he was in charge of a six-year project designed to study and assist in the development of the research, education and information components of family and population planning programs in 40 Asian countries.

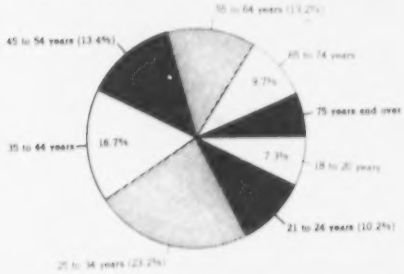
Worrall gained international experience and a commitment to the field of population while serving as The Ford Foundation's assistant representative for India and Nepal from 1966 to 1970 after an early career in agricultural extension and educational administration at Ohio State and Michigan State Universities.

Mrs. Marcy, in recognizing Worrall's contributions to PRB, cited the increasing professionalization of the PRB staff, stating that in 1984 there were 15 graduate degrees represented compared to three in 1976. She said the new PRB headquarters building equipped with modern information processing systems provides an effective working environment for the staff and a convenient focal point for other population organizations and the public.

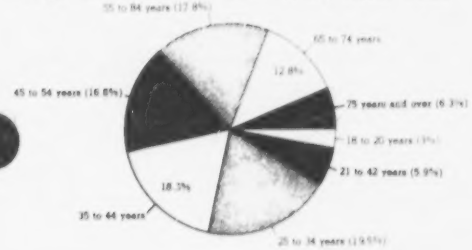
"Financial support," she said, "has been substantially improved through more multi-year grants from major donors such as The Andrew W. Mellon and William and Flora Hewlett Foundations and through the establishment for the first time in the Bureau's history of an endowment fund." A wholly owned profit-making subsidiary, The Demographic Information Service Center (DISC), established in 1981, is enabling PRB to extend its services to the business community and use the proceeds to underwrite program activities. □

SPEAKING GRAPHICALLY . . .

U.S. Population by Age, 1982



Reported Federal Voting by Age, 1982



These two pie charts depict the age and disparity between the U.S. voting population and the population of voting age. This difference is due to the fact that voter participation increases with age. Thus, the voting population age 44 and under made a commanding potential majority (57.4 percent), as of 1982. But in that year, it was voters 45 and over who made an actual majority (53.2 percent) in the voting booth.

Source. U.S. Census Bureau. *Current Population Reports*, P-20, No. 383.

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DEMOGRAPHER'S

The Case of the Elusive Infant Mortality Rate

by Robert B. Hartford

A year ago, INTERCOM published Carl Haub's article "Where Does the U.S. Stand in Infant Mortality?," in which the U.S. was compared with 30 other countries,[1] and ultimately ranked 19th. Nevertheless, the underline in Haub's title illustrated a nagging doubt shared by many that such comparisons may not be valid.

For example, we sometimes hear statements like "You can't compare the U.S. with its large mixed population with small European countries"; "They (the other countries) must be counting a different way."

These statements voice the layperson's concern with four criteria for comparability of data: (a) *appropriateness of unit of analysis*, whether or not the population measured is a certain minimum size or conforms to some social or demographic standard; (b) *completeness*—the extent to which all relevant events are counted; (c) *coverage*—the extent to which all population segments or subgroups are included in the registration system within a country; and (d) *uniformity of measurement*—use of standard definitions and measurement procedures.

The appropriateness criterion meant that (following UN practice) Haub excluded countries reporting less than 50 infant deaths, whose rates might be easily skewed. (In addition, the "city states" of Hong Kong and Singapore are candidates for exclusion, as they lack the urban/rural diversity of the other countries on the list.) Completeness of registration was not a problem in highly industrialized countries with highly developed medical care and statistics-recording systems, and in recent years, coverage has been essentially comprehensive.

It is with the uniformity of measurement that complications arise—in discriminating between a fetal death and an infant death. The UN standard lists four life signs for an infant (heart beat, breath, pulsation of umbilical cord, voluntary muscle movement) any one of which constitutes a live birth.[2] Other countries have had a shorter list of admissible signs, or have not specified them. For example, the East German criteria are "action of heart *and* lungs." In Yugoslavia either breathing *or* pulsation of the heart, but *not* voluntary muscle action or pulsation of the umbilical cord, constitute "life."[3]

Still other countries have excluded infants dying within 24 hours of birth (e.g., Spain prior to 1975) or prior to birth registration (e.g., France), or set viability criteria (minimum body weight, length, etc.) for including newly born in the infant category.

But the statistics in many cases have become more standardized. Sweden, which once used a nonstandard definition, adopted the UN definition in 1960.[4] While Japan officially recognized the UN standards, in past practice other standards were apparently used until sometime in the 1970s. But analysis of the age components of Japan's infant mortality suggests that this problem was eliminated by about 1979. In France the true rate still appears to be well below the U.S. in 1980—approximately 10.8 in France and 12.5 in the U.S.

The biased rates of the remaining deviant cases are higher than the U.S. rates. A better comparison between East Germany and the U.S. is possible by examining infant mortality after the first day, which is relatively unaffected by the nonstandard definition. In 1979 (the latest year for which the appropriate East German data were available to this writer), infant mortality after the first day was 10.0 as compared to 8.3 in the U.S., strongly suggesting that the overall East German rate in 1980 was higher, and we should move the U.S. from 16th to 15th place. The East German rate is probably on the order of 14.2 to 14.5 which would place it somewhere between New Zealand and Israel.

Now let us return to the first objection;raised in this article: "You can't compare the U.S. with its large mixed population with small European countries."

This objection is rather puzzling; presumably it is based either on the notion that health is easier to improve in a small country than in a large one, or that ethnically homogeneous populations are healthier or are more amenable than large or heterogeneous populations to improvements in health.

Without questioning the rationale of the objection, let us examine 10 states of the U.S. with the lowest infant mortality rates in 1980. They are: New Hampshire (9.2), Wyoming (9.8), Vermont (9.9), Minnesota (10.0), Colorado (10.1), Wisconsin (10.3), Hawaii (10.3), Kansas (10.4), Utah (10.4) and Massachusetts (10.5).

The populations of most of these states are small and homogeneous. If we were to insert these states into Haub's list, we would find that all 10 fell between eighth and 10th place. Even excluding the nonwhite infant mortality from the 10 states would not improve their ranking. In fact, on a national level, the infant mortality of whites in the U.S. (11.0) would only qualify for a 10th place.

The performance of Japan would seem to deal a final blow to this objection; with a population about half

PAGE

Robert B. Hartford is Deputy Director, Office of International Statistics, National Center for Health Statistics, Hyattsville, Md.

Countries of the World Ranked by 1980 Infant Mortality

Country	Infant Mortality Rate 1980	1981	1982
1. Sweden	6.9*	6.9*	6.8
2. Japan	7.5*	7.1	6.6
3. Finland	7.6	6.5	
4. Norway	8.1	7.5	
5. Denmark	8.5*	7.9	8.4(p)
6. Netherlands	8.6	8.2	8.3
7. Switzerland	9.1	7.6	
8. France[a]	10.1*	9.7*	9.3
9. Canada	10.4	9.6	9.1
10. Australia	11.0	10.0	10.3
Belgium	11.0	11.7	11.7(p)
12. Spain	11.1	10.3	
13. Ireland	11.2	10.6	
14. United Kingdom	12.1	11.0(p)	
East Germany[b]	12.1	12.3	
16. United States	**12.5**	**11.7**	**11.2(p)**
17. West Germany	12.6	11.6	10.9
18. New Zealand	13.0*	11.8*	
19. Austria	14.3*	12.6	12.8
Italy	14.3	14.1	12.7(p)
21. Israel	15.1	14.6	13.9
22. Malta	15.5	13.1	13.9(p)
23. Brunei	17.5		12.8
24. Greece	17.9	14.3(p)	
25. Puerto Rico	18.5	18.6	
Czechoslovakia	18.5*	16.9	16.1(p)
27. Costa Rica	19.1	18.0	
28. Cuba	19.6	18.5	17.3(p)
29. Bulgaria	20.2	19.5	
30. Poland	21.2	20.6	20.2(p)
31. Hungary	23.2*	20.8*	19.7(p)

* = updated
(p) = provisional

[a]Because of slight undercounting of first day mortality, the French rates are probably low by about 0.6 to 0.8, which would place France after Canada in the list.
[b]The non-standard definitions in use in East Germany probably reduce the rates by 2.0 to 2.5, which means that East Germany should rank somewhere between New Zealand and Israel.

the U.S.'s, it nevertheless attained an infant mortality rate of 6.6 in 1982, placing it slightly lower than Sweden (6.8), which has traditionally had the lowest infant mortality in the world.

In the final analysis, only three modifications are suggested to Haub's ranking: (a) Remove the city states, Hong Kong and Singapore, from the list; (b) Move East Germany to a higher ranking—probably somewhere between New Zealand and Israel; (c) Update provisional to final data and shift ranking as necessary. (Updated data are indicated by an "*".)

We then conclude that instead of ranking 19th out of 33, the U.S. ranks 15th out of 31. While it is clear that the U.S. still lags behind many industrialized countries, we must recognize that even our best efforts may not materially affect our ranking in the immediate future. What we do need to recognize is that there is solid evidence that we can achieve much lower rates than we have now and that we must carefully monitor our progress to ensure that infant mortality declines are sustained by all segments of the population, not just by the national total. □

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3. Klinger, A., *Infant Mortality in Eastern Europe 1950-1980*, pp. 58-61. Statistical Publishing House, Budapest, Hungary, 1982. See page 10 also for additional commentaries on the quality of early neonatal mortality in Bulgaria and Romania.
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OPINION

by Julian L. Simon

In the short run, an additional person—baby or immigrant—reduces the standard of living. Another consumer causes the fixed stock of goods to be divided among more people. And as Malthus argued, more workers result in less output per worker.

However, if resources are not fixed, then the Malthusian doctrine of diminishing returns does not apply. Given some time to adjust to shortages with known methods and new inventions, people create additional resources.

What is extraordinary about the creation of new resources is that a shortage due to population or income growth usually leaves us better off than if the shortage had not arisen, thanks to the resulting new techniques. (For example, plastics began as a substitute for elephant ivory in billiard balls.) Raw materials have actually become less scarce. Throughout history, prices of raw materials have fallen relative to wages and even relative to consumer prices—despite the common sense that if one begins with an inventory and uses some up, there will be less left.

Whether the positive responses we make to a shortage induced by population growth outweigh the short-run negative effect depends upon the century and the culture. Only empirical data can furnish the answer.

For the richer countries during the past century, population growth has not shown a negative effect upon economic growth. Nor do cross-national comparisons show any negative effects. In the poorer countries, income grew as fast or faster than in the richer countries between 1950 and 1975, though population grew much faster in the poorer countries.

Immigrants are particularly beneficial, because they usually arrive young and strong. Therefore they contribute more to the public coffers in taxes than they receive in welfare services. □

Julian L. Simon is the author of *The Ultimate Resource*, and is presently Professor of Business Administration at the University of Maryland. This column was adapted by him from his recent article in *USA Today*.

Acid Rain Threatens Trees

The most recent paper by Worldwatch Institute, "Air Pollution, Acid Rain, and the Future of Forests," defines the causes and effects of acid rain on world forests. According to author Sandra Postel, "Acid rain is a part of a much larger pollution problem"—the expulsion into the atmosphere of the by-products of fossil-fuel burning. Other by-products are carbon dioxide and ozone gas (which damages forests), but acid rain is considered to be the most damaging to the environment, at least in the short run.

The solution to this problem is, obviously, to clean up the by-products or switch to alternate energy sources, though this is more easily said than done. In the meantime, acid rain remains the affliction of more developed countries. At least 9 million acres of European and eastern U.S. forests now show damage linked to air pollutants. Some of the more severe cases are West Germany, where forest damage nationwide jumped from 8 to 34 percent in only a year; Czechoslovakia, where dying trees cover 1.2 million acres; and in Poland, where scientists warn that by 1990 trees may be lost on as many as 7.4 million acres. □

Copies of *Worldwatch Paper 58*, "Air Pollution, Acid Rain, and the Future of Forests," by Sandra Postel, are available from PRB. Single copies are $2.00 each; 2-10 copies, $1.50 each; 11-50 copies, $1.25 each; 51 or more, $1.00 each. Orders and checks (made payable to PRB) should be sent to PRB, P.O. Box 35012, Washington, D.C. 20013. (PRB assists Worldwatch Institute in the distribution of its papers.)

Christopher Tietze 1908-1984

Christopher Tietze, one of the world's foremost specialists in the demographic and public health aspects of abortion, died April 4, 1984, in New York City. He was 75.

Tietze, an Austrian physician, emigrated to the U.S. in 1938. He served as Director of Research of the National Committee on Maternal Health, and in 1967 became Associate Director of the Population Council's Biomedical Division. At the Council he was the author of *Induced Abortion: A World Review*, the definitive general reference work (updated every two years) on the status and prevalence of abortion around the world. He was the recipient of many awards, including (in 1977) the Carl Schultz Award from the Population Section of the American Public Health Association, for his contributions to the field of population/family planning. □

NEW FROM PRB

"Population Change, Resources, and the Environment," by Judith Jacobsen. How can the world's population live in balance with the resources it uses and the environment it inhabits and shapes? This 16-page issue of *Population Trends and Public Policy*, PRB's series directed at policymakers, draws on papers presented at the 1983 PRB National Conference and Adult Learning Workshop at the Wingspread Conference Center, Racine, Wis. There, discussion focused on environmental factors limiting expansion of the world's food supply; the dilemma of fostering Third World economic development; and prospects for energy development.

"St. Vincent and the Grenadines" and **"Belize,"** both by Leon F. Bouvier. Continuing PRB's Occasional Series: The Caribbean, these two 16-page booklets summarize the population history, status, and dynamics of these two island-nations, with text, statistics, and graphics. ($2.00 each).

"Population Education: Tools for Teachers," by PRB's Population Education Dept. This six-page issue of *Interchange* for March 1984 is a brand-new annotated population resource list for educators, emphasizing current topics, lively reading, and a wide spectrum of recent publications and audiovisual aids. ($1.00 each; 2 or more, $.75 each.)

1984 World Population Data Sheet. Vital numbers in 14 categories for 172 countries on an 18½x24" wall chart. ($2.00 each; 2-10 copies, $1.75 each; 11-50, $1.50 each; 51 or more, $1.25 each.)

Order Information: Orders of $20.00 and under must be prepaid and include $1.00 for postage and handling. Send order and remittance to PRB, Circulation Dept., P.O. Box 35012, Washington, D.C. 20013. (Checks payable to PRB.)

WORLD FOOD NEWS

Broadly speaking, most people in the world live on a diet based on one or more of the following staple foods: rice, wheat, maize, millet and sorghum, roots and tubers, and animal products. In addition to the cereals, which provide half of total world calorie consumption, animal products account for 17 percent and roots and tubers provide about 6 percent.

Some 600 million tons of cereals (over a third of world production), however, are fed to animals every year. The proportion of world production used this way is rising steadily. Grain converted to meat loses 75 to 90 percent of its calories and 65 to 90 percent of its protein. It can be argued that grain fed to cattle, pigs and chickens could be better used to feed hungry people directly.

In developed countries over two-thirds of the grain consumed is fed to animals. The rising demand for feed has encouraged farmers to increase cereal yields. On average these yields are now nearly 3.5 tons per hectare compared with about 1.1 tons per hectare in both developing and developed countries in the 1930s.

Rice storeroom in India.

Preventing cereals from being used as animal feed would not automatically make more of them available for hungry people. In fact, it would probably reduce cereal production. The basic problem, in the view of food specialists, is that poor people do not have the purchasing power to buy the cereals that they need. Restricting the use of cereals for animals would not on its own solve the problem.

At the same time, the increasing use of cereals for feed reflects a widespread preference for animal products in the human diet. Already, middle-income countries are following the same pattern as the industrialized countries. About one-quarter of grain consumed in middle-income countries goes to feed livestock. Low-income developing countries use less than 2 percent of their total cereals this way. □

World Food News is prepared by the North American Liaison Office of the Food and Agriculture Organization of the United Nations.

Population Update

Estimated United States Population:

As of Feb. 1, 1984	235,554,000
As of Feb. 1, 1983	233,432,000

The above estimates include armed forces overseas and are from U.S. Bureau of Census, *Current Population Reports*, Series P-25, No. 947.

Estimated World Population:

As of May 1984	4,749,000,000
Annual Growth	83,000,000

Estimated by extrapolation of the mid-1984 population given on the 1984 World Population Data Sheet.

Latest Provisional Statistics for the U.S.: Summary 1983

Item	12 months ending with December					
	Number		Rate			
	1983	1982	1983	1982	1981	1980
Live births	3,614,000	3,704,000	15.5	16.0	15.9	15.8
Deaths	2,010,000	1,986,000	8.6	8.6	8.7	8.7
Natural increase	1,604,000	1,718,000	6.9	7.4	7.2	7.1
Marriages	2,444,000	2,495,000	10.5	10.8	10.6	10.6
Divorces	1,179,000	1,180,000	5.0	5.1	5.3	5.2
Infant deaths	39,400	41,700	10.9	11.2	11.7	12.5
Population base (in millions)	...	...	233.7	231.5	229.3	227.1

Note. Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births. Rates are based on revised population estimates from the 1980 Census.

Source. Monthly Vital Statistics Report (Vol. 32, No. 12) from the National Center for Health Statistics.

LETTERS TO THE EDITOR

Your recent Spotlight on Viet Nam (POPULATION TODAY, February 1984) provided an interesting and generally accurate overview of the population problems facing this country at the present time. I would, however, like to make the following brief comments:

1. The population census of Oct. 1, 1979 gave the total population as 52,741,766. As the population has been increasing at a rate of some 1,200,000-1,300,000 new citizens every year, the present population (Apr. 1, 1984) is probably fairly close to 59,000,000. Some government officials privately concede that the population has now surpassed the 60,000,000 mark.

2. Although seven of Viet Nam's 40 provinces now officially have a population growth rate of under 2 percent, many provinces, among them some of the most populous, are still struggling with growth rates in the vicinity of 2.5 to 2.8 percent or more. The overall population growth rate is generally estimated to be around 2.4 percent.

3. The Government's 1981-1985 Plan aimed at reaching an overall population growth rate of 1.7 percent by 1985. However, this target is obviously beyond reach, and the objective is now set at meeting this target in 10 of the 40 provinces by next year.

4. As a matter of interest, there are about 25,000 new couples married every year in the greater Hanoi area (population 2,850,000); there are at least 200 live births every day, or some 70,000 new citizens every year in this area. The population growth rate in the capital city region is said to be close to 2.4 percent at the present time (2.2 percent in urban areas, 2.6 percent in rural areas).

5. Finally, you rightly point out that China and the U.S. no longer provide aid to Viet Nam. However, after the Soviet Union and the Eastern European countries, the present major donors are Sweden and the various specialized agencies of the UN. France is also increasing its aid program.

I trust these comments will be of interest to you.

Sincerely,
Michel Amiot
Deputy Representative and Senior Advisor on Population
UN Fund for Population Activities, Hanoi Office

TAKE A NUMBER...

Sun Belt Cities shouldered aside their northern brethren, according to estimates of mid-1982 city populations newly released by the Census Bureau. Los Angeles has now moved past Chicago to gain the number 2 position, while Houston pushed Philadelphia out of fourth spot. Of the 10 most populous U.S. cities, six are in the Sun Belt.

	July 1, 1982		April 1, 1980	
City	Population	Rank	Population	Rank
New York	7,086,096	1	7,071,639	1
Los Angeles	3,022,247	2	2,968,579	3
Chicago	2,997,155	3	3,005,072	2
Houston	1,725,617	4	1,595,138	5
Philadelphia	1,665,382	5	1,688,210	4
Detroit	1,138,717	6	1,202,493	6
Dallas	943,848	7	904,570	7
San Diego	915,956	8	875,538	8
Phoenix	824,230	9	790,044	9
San Antonio	819,021	10	786,010	11

States Increase Population. Between 1980 and 1983, Alaska increased its population by 19 percent, making it by far the fastest growing state in population in the 1980s. Other states with high population increases are Nevada, gaining 11.3 percent since the 1980 census, Utah (10.8 percent), Texas (10.5 percent), and Florida (9.6 percent). The total U.S. population increased by 3.3 percent, or about 7.4 million, from 1980 to 1983. These figures come from the U.S. Census Bureau's newly released report, *Estimates of the Population of States: July 1, 1981 to 1983*, Series P-25, No. 944.

Including Noncash Benefits Lowers Poverty Estimates. In August 1983 , the U.S. Census Bureau reported that 34.4 million or 15 percent of the population were officially below the poverty level in 1982. This estimate, however, does not include the value of noncash benefits. If the Bureau includes the value of food stamps, free or reduced price school lunches, public or other subsidized housing, Medicaid and Medicare, the 1982 poverty population, thus redefined would be somewhere between 22.9 million (10.0 percent) and 31.4 million people (13.7 percent).

U.S. Birth Rate Takes Sharp Drop: The U.S. birth rate took a sharp downward turn in 1983, from 16.0 births per 1,000 population in 1982 to 15.5. This was due in part to a slight "aging" of the female population of childbearing age, but also to a real decline in fertility. For several years, U.S. fertility had remained fairly steady, rising from its lowest point ever in 1976. It will be interesting to see if this new development is but another temporary fluctuation or the beginning of a longer-term trend.

The Breadwinner of U.S. Households? According to a study recently conducted by the U.S. Census Bureau, 12.1 percent of all American households contain women as the primary wage earner. This 12.1 percent can be more or less equally divided into three different types of households: a wife whose husband has been disabled or retired; has been laid off or his hours have been cut; or works full-time all year, but earns less than his wife. Among black households, the national figure was 19.5 percent, while among Hispanic households it was 10 percent.

addenda...

George Burns on Making U.S. Life Expectancy Rates Work for You:

"The point is, with a good positive attitude and a little bit of luck, there's no reason you can't live to be 100. Once you've done that, you've really got it made, because very few people die over 100."

—*from* How to Live to Be 100 or More, *by G. Burns, New American Library.*

CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 2213 M St., N.W., Washington, D.C. 20037.

STATISTICAL ABSTRACT OF THE U.S.: 1984 (104th edition). U.S. Bureau of the Census: U.S. Government Printing Office, Washington, D.C., 1983. $19.00 paper.

As in its 103 previous years, this annual summary from the U.S. Bureau of the Census is a valuable and sometimes amusing compilation of U.S. social, economic, environmental, political, and demographic statistics.

Did you know that in 1982, U.S. arcades contained 1,220,000 coin-operated video games? In that same year, 35 percent of U.S. households grew fruits or berries, and 3,000 drive-ins served U.S. moviegoers. Finally, 8,102,000 tickets were sold on Broadway during 1982.

Whether you are curious about how many pleasure trips in cars Americans take each year (44 percent), or how many babies were born in the U.S. in 1982 (3,704,000 babies born), the *Statistical Abstract's* 1,542 tables can answer your questions.

Bridget Carroll

POPULATION: AN INTRODUCTION TO SOCIAL DEMOGRAPHY, by Paul E. Zopf, Jr. Palo Alto, Calif.: Mayfield Publishing Co., 1984. 501 pages. $24.95. ISBN 0-87484-715-X.

Zopf introduces this new college-level text, with considerable emphasis on demography and social causes and effects of demographic phenomena.

POPULATION has four major subdivisions: Demographic Realities and Problems, including discussions of population explosion and zero population growth; Components of Demographic Change, such as fertility, mortality, and migration; Populations and Human Systems (labor, marriage, etc.); and Planning the Future (population control).

POPULATION provides the student with a demographic text that enriches one's understanding of the linkages between population and social dynamics.

—Carolyn Schultze

WOMEN AND WORK IN AFRICA, edited by Edna G. Bay. Boulder, Colo.: Westview Press, 1982. $23.00.

This collection of articles grew out of a symposium on women and work in (sub-Saharan) Africa. Not only is the general authority of African women established via their economic importance (in agricultural areas), but so is their relatively high social status and political power. Nonetheless, as this book shows, inequities remain, and in some areas are increasingly where the commercialized economy and the fruits of development favor men.

—Alison Moses

U.S. IMMIGRATION POLICY, edited by Richard R. Hofstetter. Durham, N.C.: Duke University Press, 1984. 310 pages. $28.75. ISBN 0-8223-0476-7.

Migration to America from less developed regions of the world "will transform America from an ethnic melting pot to a racial polyglot" if present trends continue, contends Richard Hofstetter, editor of this group of essays on U.S. immigration policy written by practitioners and scholars in law, government, and the social sciences. The introduction is by Attorney General William French Smith.

Hofstetter and others address the population explosion and illegal aliens, push and pull factors, and integration of immigrants into the U.S. economic and social structure. Presenting both liberal and conservative viewpoints, U.S. IMMIGRATION POLICY is directed toward anyone interested in or concerned with the U.S.'s unique immigration situation.

—Carolyn Schultze

PUBLICATIONS RECEIVED

THE FAR EAST AND AUSTRALASIA. (15th ed.) Detroit, Mich.: Gale Research Co. 1984. 912 pages, $140.00.

FERTILITY DETERMINANTS IN CUBA, Paula E. Hollerbach and S. Diaz-Briquets, Washington, D.C. National Academy Press, 1983. 241 pages.

WORLD REFUGEE SURVEY 1983, edited by Rosemary E. Tripp. New York: U.S. Committee for Refugees, 1983. 76 pages. $6.00.

THE NINE AMERICAN LIFESTYLES: Who We Are and Where We Are Going, by Arnold Mitchell. New York: MacMillan, 1983. 302 pages. $19.50.

THE FEASIBILITY OF MEASURING INTERNATIONAL FLOWS OF HUMAN RESOURCES. New York: UNCTAD Secretariat, 1982. 103 pages.

CHILD GROWTH IN AN ASHANTI VILLAGE, by Eric Sager. Groningen, The Netherlands: Geographical Institute, Groningen, State University, 1983. 97 pages.

COUNTY AND CITY DATA BOOK 1983. Washington, D.C.: U.S. Dept. of Commerce 1983. 996 pages. $24.00.

PEOPLE, POVERTY AND SHELTER, by R.J. Skinner and M.J. Rodell, London: Methuen, 1983. 195 pages. $14.95.

POPULATION POLICY BRIEFS: Current Situation in Developing Countries, 1983, New York: Population Division, Dept. of International Economic and Social Affairs of the UN Secretariat. 1984. 54 pages.

ADOLESCENT PREGNANCY IN SUBURBIA, by Hugh Wilson. New York: Planned Parenthood of Nassau County, Inc., 1983. 39 pages, $5.00.

AMERICAN INDIAN POLICY, by Theordore W. Taylor. Mt. Airy, Md.: Lomont Publications, 1983. 230 pages, $12.95.

AMERICAN MEDICINE AND STATISTICAL THINKING 1800-1860, by James H. Cassidy, Cambridge, Mass.: Harvard University Press, 1984. 306 pages. $22.50.

DEVELOPMENT PLANNING AND POPULATION POLICY IN PUERTO RICO, by Kent C. Earnhardt. Rio Piedras, P.R.: Editorial de la Universidad de Puerto Rico, 1982. 214 pages.

1982 DEMOGRAPHIC YEARBOOK, United Nations Dept. of International Economic and Social Affairs. New York: United Nations, 1984. (No. ST/ESA/STAT/SER.R/12)

WOMEN IN THE CITIES OF ASIA, edited by James T. Fawcett, Siew-Ean Khoo, and Peter C. Smith. Boulder, Colo.: Westview Press, 1984. 406 pages. $22.00.

THE STUDY OF POPULATION: Elements, Patterns, Processes. by George A. Schnell and Mark Stephen Monmonier. Columbus, Ohio: Charles E. Merrill, 1983. 371 pages.

GEOGRAPHIC MOBILITY: March 1981 to March 1982. U.S. Census Bureau, *Current Population Reports,* Series P-20, No. 384.

SPOTLIGHT

CANADA

Population, 1984: 25,140,000
Population per sq. mile: 7
Births per 1,000 pop., 1982: 15.1
Deaths per 1,000 pop., 1982: 6.9
Annual rate of population growth, 1984: 1.0 percent
Area: 3,851,790 sq. mi. (7 percent larger than the United States)
Major exports, 1981: motor vehicles, lumber, woodpulp, metals, natural gas and petroleum, wheat — $69.8 billion
Major imports, 1981: motor vehicles, industrial and agricultural machinery, crude petroleum, chemicals — $65.8 billion

Canada is the world's second largest country in area, but its vast space contains only the world's 31st largest population. Eighty percent of all Canadians live within 100 miles of the country's 5,335 mile border with the United States, half in the southeastern section near the Great Lakes and St. Lawrence River. Canada's history began with Cabot's landing in Newfoundland in 1497. Champlain's founding of Quebec City in 1608 firmly established French influence. French rule ended with the British victory at Quebec in 1759 but French culture and language continued strong, particularly in Quebec and New Brunswick provinces. Today, Canada still seeks a constitutional formula to accommodate French-speaking citizens, whose pride in their French heritage is evident even in Quebec license plates — "je me souviens,"—"I remember."

The past several decades have brought major changes in Canada's economy, from an agricultural to an industrial base. In recent years, the economy has seen rough going, culminating in a decline in Gross National Product in 1982. Recovery is now anticipated, and while economic growth is still slow, the outlook is more optimistic.

During the 1970s, the boom in the petroleum and mineral industries caused a boom in population growth in the West. Unlike the parallel growth in the South and West of the United States, this situation has changed, temporarily at least, as prospects for the petroleum and minerals industries have worsened. Alberta's population grew by 38 percent between the 1971 and 1981 censuses, but immigration has dropped since then. The *Calgary Herald* recently pointed to half-finished office buildings and wondered "Has Alberta's Sun Set?" Still, the slower rate of growth evidenced in the Atlantic Provinces and Central Canada—Ontario and Quebec—means a shift in House of Commons seats in favor of the West.

Fertility trends in Canada and the U.S. have been remarkably similar since World War II. Canada's postwar "baby boom" peaked at the same time as that of the U.S., 1957-1959, rose to almost the same level (a total fertility rate [TFR] of 3.9 in Canada, 3.8 in the U.S.) and dropped below the "replacement level" of 2.1 children per woman in the same year, 1972. Today, Canada's TFR is the same as the U.S.'s, 1.8. Among the provinces, fertility is lowest in Quebec, with a 1982 TFR of 1.5.

Canada is one of the few developed countries with a policy still favorable to substantial immigration. Although its most recent policy (see *PT*, Jan. 1984) is designed to accept only about one-fifth as many legal immigrants as the U.S.—about 95,000 persons per year—the country's legal immigration *rate* is actually somewhat higher than that of the U.S. Canada's policy allows for a generous proportion of immigration for family reunification purposes and refugees, but also emphasizes immigrants with needed occupational skills in light of recent high unemployment among Canadians. The origins of Canada's immigrants has shifted, with a greater proportion arriving from Asia and Latin America.

PRB photo by Carl Haub

A fast-food outlet in Quebec is one example of Canada's adaptation of two languages.

Canadian cities continued to grow at an impressive rate in the 1970s, unlike many of their American counterparts. At one time, city limits were simply defined by how long it took a person to walk to work. Today, highways and rapid transit systems have boosted urbanization; Toronto, the largest metropolitan area, with 3 million people and Montreal, in second place with 2.8 million, account for almost one-fourth of the country's population. Some smaller cities have not grown at all; Sudbury and Windsor lost population in the 1970s and Saint John, Thunder Bay, and Trois-Rivieres barely grew.

Bilingualism remains a distinct feature of Canadian society. In 1969, legislation was passed to give both English and French equal status, but the task has been difficult. The large majority of Canadians with dual language capability remain those with French as their first language. At present, however, there are about 100,000 English-speaking children enrolled in French immersion programs.

The Canadian labor force continues to see an increase in women in its ranks. The number of working women increased by 62 percent from 1969 to 1981 and it is projected that two-thirds of all women over 20 will be working by the year 2000. Most women, however, still work in traditionally female jobs such as clerical work, teaching, and nursing.

While some demographic trends in Canada are similar to those in the U.S., much of its demography is distinctly Canadian. 1984 has been set as a year for the promotion of tourism, and as the recession ends, perhaps more Americans will learn first-hand just how fascinating and different their Northern neighbors really are. □